July 18, 1944. A. MATTHEWS ET AL 2,353,741

GARMENT DRIER

Filed Feb. 20, 1943 2 Sheets-Sheet 1

Fig.-1

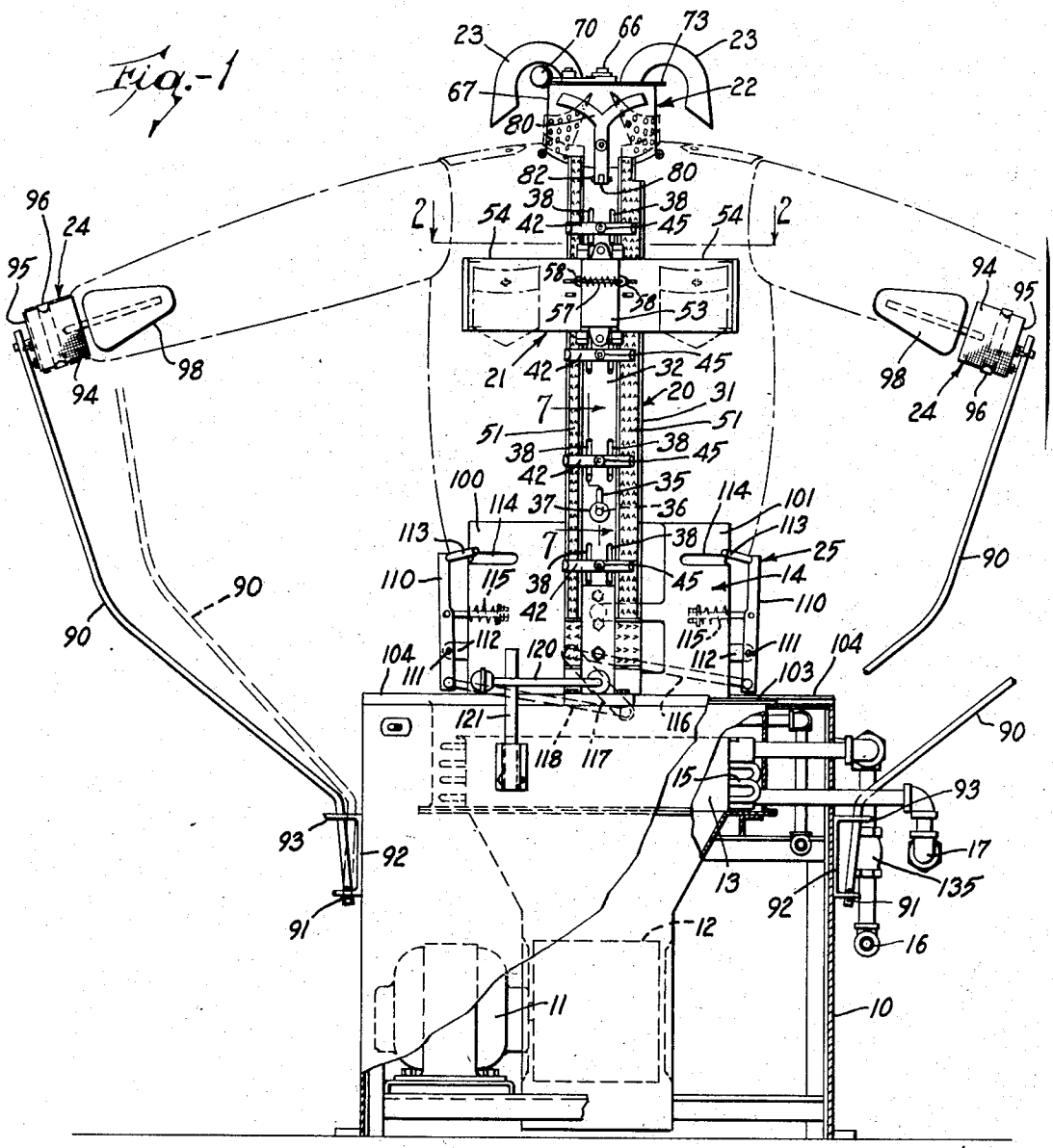


Fig.-2

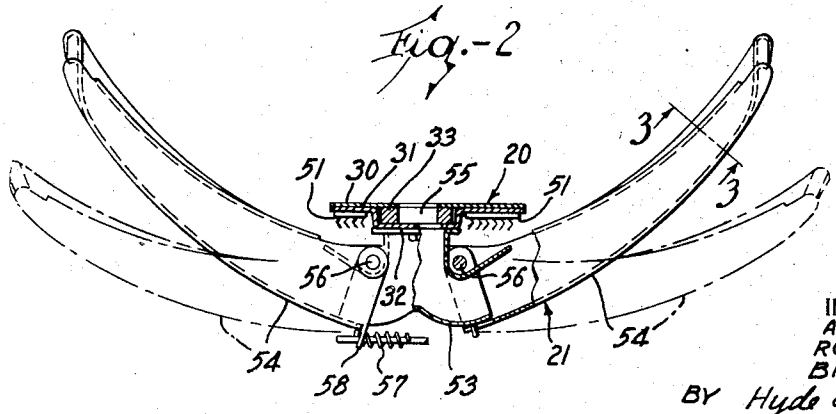
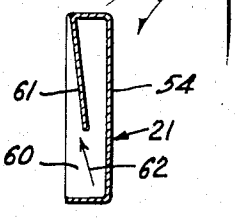


Fig.-3



INVENTORS
ALBERT MATTHEWS
ROBERT C. PAULY
BRUCE E. MAXON
BY Hyde and Meyer
ATTORNEYS.

July 18, 1944. A. MATTHEWS ET AL 2,353,741

GARMENT DRIER

Filed Feb. 20, 1943 2 Sheets-Sheet 2

Fig.-4

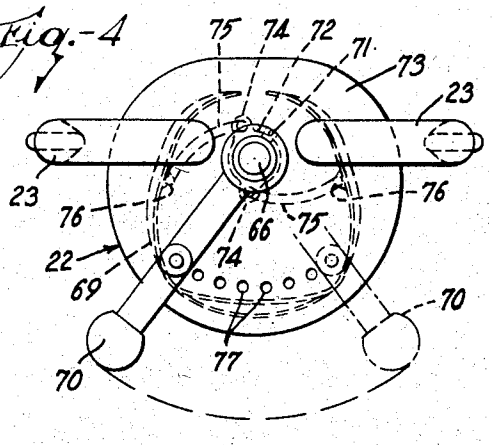


Fig.-5

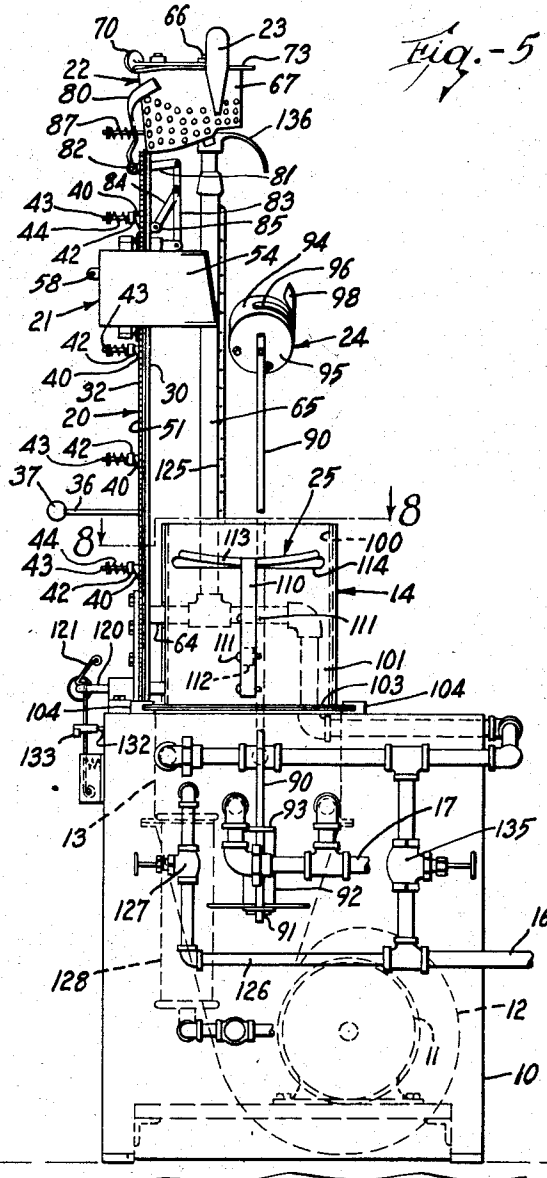


Fig.-6

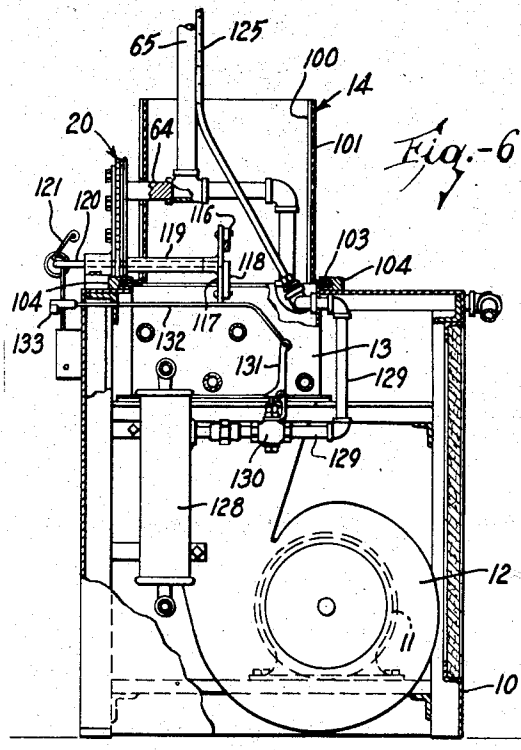


Fig.-7

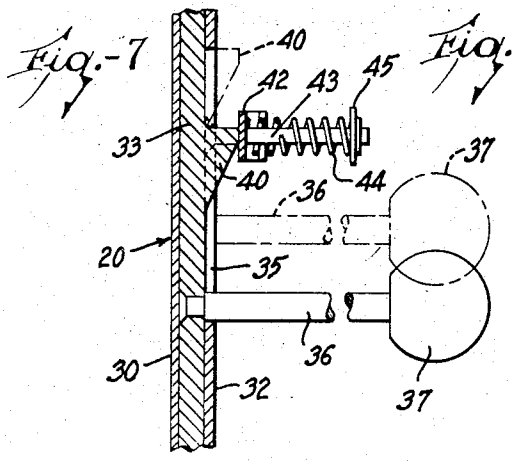
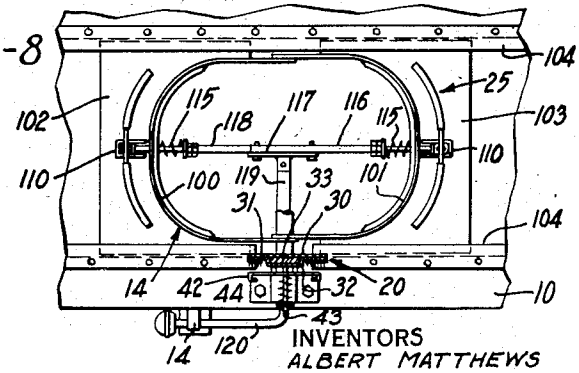


Fig.-8



INVENTORS
ALBERT MATTHEWS
ROBERT C. PAULEY
BRUCE E. MAXON

BY Hyde and Meyer.
ATTORNEYS

Patented July 18, 1944

2,353,741

UNITED STATES PATENT OFFICE

2,353,741

GARMENT DRIER

Albert Matthews, Robert C. Pauly, and Bruce E. Maxon, Cincinnati, Ohio, assignors to The American Laundry Machinery Company, Cincinnati, Ohio, a corporation of Ohio

Application February 20, 1943, Serial No. 476,548

12 Claims. (Cl. 223—70)

The invention relates to novel and improved apparatus for drying or finishing articles of clothing of the general nature of shirts, coats or other body garments. It particularly relates to apparatus for air drying or steam-treating such garments and for producing an ironed or pressed appearance without resort to the usual pressing or ironing apparatus, and without employing internally expanding, permeable bags or forms of similar nature.

One object of the invention is to provide novel and improved means for closing, securing and retaining coats, shirts, or similar garments in dressed position while air or steam is applied to the interior thereof.

A further object of the invention is to provide apparatus of this nature wherein means is provided for supplementing the drying effect in the immediate neighborhood of reinforced portions of the garment, or portions such as pockets and the like where two or more layers of material are superposed.

A further object of the invention is to provide apparatus of the above nature embodying means for producing a pressed or finished effect especially in certain locations in the garment, as will appear.

A further object of the invention is to provide apparatus of this nature including expandible means located internally of the garment and operatively linked with clamping means located externally of the garment for securing and simultaneously sealing open terminal portions of the garment, such as the tail or skirt portion of a shirt or coat, whereby air escape through the bottom opening is substantially eliminated.

A further object of the invention is to provide apparatus of this nature for the finishing of shirts, coats or the like embodying means for clamping the front open edges of the garment and additional means for clamping the collar portion of the garment, said several means being operatively associated, whereby operation of one clamping means produces operation of the other clamping means, with respect to both attachment and detachment of said several clamping means.

Other objects and advantages will be apparent on consideration of the following description in connection with the accompanying drawings, wherein

Fig. 1 is a front elevation of an apparatus illustrating one embodiment of the present invention, parts being broken away.

Fig. 2 is a horizontal sectional view taken on the line 2—2 of Fig. 1;

Fig. 3 is a vertical sectional view taken on the line 3—3 of Fig. 2;

Fig. 4 is a top plan view of the upper portion of the apparatus;

Fig. 5 is a side elevation of the apparatus;

Fig. 6 is a view corresponding to the lower portion of Fig. 5, but with parts removed to show the cabinet interior;

Fig. 7 is a vertical sectional view taken on the line 7—7 of Fig. 1; and

Fig. 8 is a horizontal sectional view taken on the line 8—8 of Fig. 5.

Before proceeding to a detailed description it may be pointed out that the invention, while applicable to the drying and finishing of various types and styles of garments, is particularly suited to the drying and finishing of heavier types of shirts, such as those worn by soldiers, sailors, or industrial workers, and the invention will be described in connection with a shirt of this nature, it being understood that the description and drawings are presented for purposes of illustration merely, and not of limitation. Those skilled in the art, on consideration of the present specification and drawings, will have little difficulty in adapting the apparatus to other garments of form or contour generally related to that herein described.

As may be determined from the delineation of the objects and advantages already mentioned, the apparatus dries and finishes the entire garment and avoids any necessity of hand finishing certain locations thereon. A shirt for example is supported on a skeleton form, and heated air is supplied directly to the shirt interior under a pressure sufficient to cause the air to permeate and pass through the single ply portions of the fabric. To insure the production and continuance of pressure above atmospheric during the drying period the neck, cuffs, and lower extremities of the shirt are substantially closed by being secured around suitable portions of the apparatus, as will appear. Additional equipment is provided for directing auxiliary air streams against double or multiple ply portions of the garment not so readily penetrable by air, such as shoulder straps or breast pockets.

Apparatus heretofore devised has been limited either to the use of a hollow dummy or form over which the garment was dressed, or a collapsible bag has been inflated within the garment, both the dummy or bag being foraminous to permit air to be blown outwardly therethrough. In any

of the prior methods it has been difficult to solve the problems arising from attempts to accommodate a single such means to a variety of garment sizes. This problem is here solved in an effective manner by entirely dispensing with such dummy or bag, and providing improved apparatus which permits the garment, so to speak, to be substantially self-sustaining under the influence of internally applied air pressure. With this general foreword we proceed to a specific description of the apparatus shown in the drawings.

In the apparatus now to be described we show conventional means for heating a volume of air and supplying it to the garment interior under a pressure sufficient to balloon the garment and render it self-supporting. The apparatus comprises a base 10 which carries the shirt supporting apparatus. The base 10 is a hollow cabinet within which is located a motor 11 and a blower 12, both of conventional character. The blower delivers an air blast upwardly through heating chamber 13 communicating with a suitable aperture in the cabinet top and therefrom to a stack 14 which forms the shirt tail supporting member, as will appear. Below the stack, in the heating chamber, air heating means is provided comprising a bank of steam pipes 15 (Fig. 1) in series with a supply pipe 16 and a return pipe 17 (Fig. 5).

The shirt supporting means will first be generally identified. It comprises an upright member or post 20 constituting a shirt front support, a pocket drier 21 carried by the upright 20 at an intermediate height thereon, collar supporting and clamping means 22 carried at the top of upright 20, right and left shoulder strap driers 23 associated with the collar support, a pair of cuff supports 24, and shirt tail clamping means 25 which cooperates with the shirt tail support or stack 14 already mentioned.

The shirt front supporting post 20 (Figs. 1, 2, 5 and 7) comprises two vertical members consisting of a flat rear plate or strip 30, and a complementary front plate or strip 31. A portion of plate 31 is channeled at 32 so that when said plates are assembled they define therebetween a vertical recess which houses a slidable bar 33 (Figs. 2 and 7). The front plate 31 is slotted at 35 to permit limited upward or downward movement of the shank 36 of a handle 37, said shank being attached to bar 33. The front plate 31 is also provided at spaced points on its vertical height with a plurality of pairs of slots 38, each such pair being spaced respectively one each side of the vertical center line of plate 31. The purpose of these slots is to permit limited upward and downward travel of wedge shaped lugs 40 which are carried by sliding bar 33 and which respond to the operation of said bar 33 when handle 37 is raised or lowered. Each pair of lugs is so disposed as to abut, over a portion of the travel of bar 33, a clamping bar 42. A stud 43 (Fig. 7) is affixed to plate 32. The clamping bar 42 is provided with an aperture to receive stud 43 in sliding relationship, the bar 42 being biased towards plate 31 by means of a spring 44 the inner end of which abuts bar 42, and the outer end of which is retained by a collar 45 fixed to stud 43. The clamping bar is thus normally biased towards contact with plate 31 but when sliding bar 33 is moved downwardly (from the dotted line position to the full line position of Fig. 7) by means of handle 37 so that the wedge shaped lugs 40 abut bar 42 in cam-like fashion, the clamping bar 42 is moved outwardly toward clamp release position away from plate 31. Four such sets of clamping bars are provided in the embodiment herein shown, as best seen in Figs. 1 and 5.

The lateral recessed edges 50 of plate 31 (Fig. 2) are each provided with a card cloth strip 51 extending substantially the full vertical length of upright member 20, and adapted to retain, respectively, the button strip and button hole strip of the shirt front edges. From the description so far, it is apparent that when a shirt is dressed on the apparatus, as indicated by the broken line outline in Fig. 1, handle 37 is lowered to disengage the clamping bars 42, the shirt edges are impaled on the card cloth strip 51, and handle 37 is then raised to permit the free ends of bars 42 to move inwardly into clamping engagement with said shirt edges.

The pocket drier (Figs. 2 and 3) consists of a hollow casing assembly carried by upright member 20 and comprising a fixed central body portion 53 and movable right and left arm portions 54, the right and left portions being substantially identical in construction and function. The front plate portion 32 and the bar 33 are slotted at 55 (Fig. 2) to permit passage of air therethrough and into casing body 53 and thence to arms 54. Arms 54 are hingedly connected, at 56, to body 53, and are biased by means of spring 57 towards contact with the pocket portions of the shirt, in the full line position, Fig. 2. The spring is supported by a rod which extends through lugs 58 in casings 54. The interior surfaces of arms 54 are provided with an aperture 60, partially closed by a depending flange 61 (Fig. 3). When the shirt is ballooned by pressure applied internally thereof, the pocket portion is forced against the interior face of arm 54 and the pocket flap abuts flange 61. In the meantime the hot air passes through aperture 55 and into body 53 and thence to arms 54 so as to impinge on the pocket exterior. Some of this air is forced upwardly between the pocket and the customary pocket flap, along the line indicated by the arrow 62, Fig. 3. As a result the pockets and flaps receive a drying effect both interiorly and exteriorly thereof, and the pressure of each flap against its supporting flange 61 produces a finished effect on the flap.

As best seen in Fig. 5, an upright pipe 65 forms part of the steam supply system. At its upper end it is capped, and supports a stub post 66 which carries means for expanding a collar support now to be described. The collar support comprises a resilient curved metal plate 67 bent as shown in Fig. 4. It is fixed to the top end of upright assembly or standard 20. It is provided with expanding means comprising a handle 70 secured by a set screw 71 to a sleeve 72 which rotates freely on post 66. The enclosure bounded by plate 67 is substantially closed by a top plate 73. Sleeve 72 has a pair of opposed, perforated ears 74. A pair of links 75 are pivotally connected, respectively, at one end to ears 74 and at the other end to similar ears 76 on the inner surface of plate 67. It is apparent from a glance at Fig. 4 that movement of handle 70 from the full line position to the broken line position expands or moves apart the terminal portions of plate 67 so that means is thus provided for accommodating or adjusting the collar support to varying collar sizes. The handle may be held in any one of a succession of positions by a detent track 77. When a shirt collar is dressed around

the collar support, a series of perforations in plate 67 permits access of heated air to the collar of the shirt.

Escape of air through the collar opening is prevented or impeded by top plate 73, except through the curved shoulder strap heating tubes 23, through the end of each one of which a stream of heated air is directed downwardly upon the strap beneath it.

A bell crank lever having a clamping arm 80 and an operating arm 81 is pivotally mounted at 82 on the upright 20. Arm 81 responds to operation of a toggle assembly 83, the knuckle of which is connected to one end of a link 84, the other end of which is connected to a lug 85 on sliding bar 33. When a shirt is dressed on the apparatus, and the bar 33 first is depressed to release and then is raised to permit clamping engagement of breast clamps 42, the same motions actuate the toggle 83 and consequently the collar clamp 80 first to release it and then to engage it with the collar wings and retain the collar in dressed position. A biasing spring 87 tends to move the clamp toward collar engaging position.

Two cuff and sleeve supporting members 24 are carried by rods 90. Since both such corresponding members and their supports are identical, one set only will be described. Member 24 (Fig. 1) is carried in loosely self-adjusting position on rod 90 which is mounted to turn at 91 on the lower lateral flange of a bracket 92. The upper lateral flange 93 is slotted to permit a certain amount of lateral play by rod 90, which, by reason of an outwardly offset center of gravity, has a tendency to fall to the full line position of Fig. 1. The cuff support is carried on the upper end of rod 90 and comprises a wire mesh or perforate cylinder 94 closed at its outer end by an imperforate plate 95 (Fig. 5) and open at the inner end for communication with the space in the shirt sleeve. The shirt cuff is dressed on the cylindrical portion and is held there by a spring clamp band 96. The spring clamp at an intermediate point thereof is secured to cylinder 94 and retains the cuff in dressed position on the cylinder.

Cylinder 94 carries a plate extension 98 which is shaped and positioned to overlie the gusset portion of the shirt sleeve. When the shirt is dressed on the apparatus, and the cuff is clamped as described, the air pressure in the sleeve forces the gusset edges against the plate and thereby not only seals the gusset opening, but also improves the finish of the edges thereof.

Shirt tail supporting means 14 has heretofore been briefly mentioned. It comprises two, upwardly extending, complementary curved plates 100 and 101 which are lapped at their meeting edges to define a generally oval enclosure forming a closed stack for heated air as previously disclosed. The overlapped edges are slidingly fitted so that the support 14 may be increased or decreased in horizontal sectional area as will be described. Sliding motion is effected by movement of base plates 102 and 103 toward or from each other in track strips 104 (Figs. 5, 6 and 8).

Each section of the tail supporting means is provided with a clamp. Both clamps are identical in construction, and one will be described (Figs. 1, 6 and 8). It comprises a lever 110 pivotally mounted at 111 on a bracket 112. The upper end of the lever has an arcuate shaped rod or member 113 which is arranged to engage in a groove 114 in the stack when the clamp is applied. A spring 115 is provided to normally bias the clamp to closed position. The lower end of the lever 110 is connected by a link 116 with one end of a pivotally movable lever 117. The other end of lever 117 is connected to another link 118 which is similar in construction and function to link 116 already described, but which operates the clamp on the side opposed to clamp 113. The lever 117 is pinned to a shaft rotatable within a bearing 119 (Fig. 6), and this shaft extends forwardly of the apparatus and is bent to form a handle 120. A spring latch 121 is mounted at the front of the apparatus and is bent at the region of contact with handle 120 so as to retain the handle in clamp-release position. When the latch 121 is released, the springs 115 (Fig. 1) move the clamps 113 toward clamping position, and initiate movement of handle 120 in a clockwise direction, Fig. 1. Further movement of handle 120, manually, in a clockwise direction expands the two sections 100 and 101 within the shirt tail portion until this part of the garment is fully extended as limited by the shirt size. This, in conjunction with the fact that the shirt extremity is clamped around a major portion of the exterior periphery, tends to produce a sealing effect so as to maintain pressure equilibrium inside the shirt when the blower is in operation.

The apparatus is provided with means for steaming the fabric of the garment by steam supplied to the interior chamber thereof. The steam is supplied and distributed through a perforated pipe 125 which is in communication with the steam inlet line 16 through a branch line 126 under control of a valve 127 and thence to a water separator 128 and therefrom through pipes 129 to the perforated pipe 125 (Fig. 6).

A valve 130 is operated by a lever 131 which in turn is manipulated by a pull rod 132 extending through the front of the cabinet and having a handle 133 for manual operation of the valve. It will be understood that when the handle 133 is pulled, steam is released through the perforations in pipe 125 which is situated substantially in the vertical center line of a garment dressed on the apparatus. Condensation on pipe 125 is prevented by disposing it in close proximity to pipe 65 which, as heretofore disclosed, is in communication with the main steam inlet, and is heated thereby. Pipe 65 is supported on a bracket 64. When steam from the inlet is supplied to the air heating system 15 through valve 135, it is simultaneously admitted to pipe 65 (Fig. 5).

The curved member 136 guides the shirt while it is being dressed on the apparatus.

Operation of the device proceeds as follows. It is assumed that steam has been admitted to the heater 15 and to pipe 65 by valve 135 and that these units are at operating temperature. Handle 120 is moved counterclockwise to latched position disengaging clamps 113 and retracting the shirt tail supports 100 and 101. Sliding bar 33 is moved to its lowermost position by handle 37, thereby releasing the breast clamps 42 and collar clamp 80, so that the button and buttonhole strips and collar can be inserted thereunder. Blower 12 is not yet in operation.

In dressing a shirt on the apparatus the shirt collar is dressed around collar plate 67, the wings of the collar being positioned under collar clamp 80. The collar plate is then expanded to fit the collar by moving handle 70 along detent 77. The button and button hole strips of the shirt are then affixed on card cloth strips 51. The shirt tails are draped or drawn around the stack sec-

tions 100 and 101. Bar 33 is raised by handle 37, until the breast clamps engage the shirt front and the collar clamp 80 is urged to clamping position upon the collar front. Handle 120 is then moved clockwise until clamps 113 clamp the shirt tails, and immediately thereafter stack sections 100 and 101 move outwardly until the natural resistance of the garment fabric prevents further expansion. The shirt cuffs are next successively dressed on their respective cylinders 94 and are clamped by means of spring clamps 96.

The blower 12 now may be operated by starting the motor 11. A draft of heated air rises through the stack and balloons the shirt outwardly, permeating the fabric and drying it thoroughly. Auxiliary streams of air are directed through strap drier tubes 23 to the outside of the shoulder straps or reinforcing strips, and through arms 54 to the breast pocket portions. Air also flows through the perforations in the collar plate, cuff cylinders, and, if desired, through perforations in the shirt tail backing plates which form the stack.

If the nature of the work requires it, or if desirable for any reason, steam may be directly applied to the garment at any desired stage of the operation, or as an independent operation, by manipulation of handle 133, operation of which distributes the steam throughout the chamber within the garment by means of pipe 125.

The garment having been dried or otherwise processed to the desired finish, the manner of its removal requires no further explanation, the above sequence of operations being reversed, both in chronological order and direction, although of course the specific sequence is not critical with respect to the order in which the dressing and undressing operations are performed.

What we claim is:

1. Garment finishing apparatus, comprising a frame having a top opening and provided with means for discharging a stream of heated air through said opening, means for securing the end edge portions of the garment skirt around the edge of said opening, an upright relatively narrow elongated post near the front portion of the edge of said opening, the width of said post being of the order of that of a shirt buttonhole strip, means on said post for releasably holding the button and button hole strips of said garment, and a closure for the neck opening of the garment also supported by said post, the garment body being free of support except at the neckband and along the button and buttonhole strips and at the edges of the shirt, and thereby being adapted to balloon when the air stream is flowing.

2. Garment finishing apparatus, comprising a frame having a top opening and provided with means for discharging a stream of heated air through said opening, means for securing the end edge portions of the garment skirt around the edge of said opening, an upright relatively narrow elongated post near the front portion of the edge of said opening, means on said post for clamping thereto the button and button hole strips of a garment, a closure for the neck opening of the garment mounted on said post, means on said closure for clamping thereto the garment collar, and common means mounted on said post for operating both of said clamping means.

3. Garment finishing apparatus comprising a frame having a top opening and provided with means for discharging a stream of heated air through said opening, a pair of oppositely curved, relatively expansible and contractable plate members vertically disposed to surround said opening and to contain and direct said air stream, garment clamping means carried by each said plate member, an upright post near the edge of said opening, means on said post for releasably holding the button and button hole strips of said garment, and a closure for the neck opening of the garment also supported by said post.

4. Garment finishing apparatus comprising a frame having a top opening and provided with means for discharging a stream of heated air through said opening, a pair of opposed, substantially semicylindrical plate members vertically disposed in edge lapped relationship to surround said opening and to direct said air stream, guide track means on top of said frame, complementary guide means on each of said semicylindrical members for cooperation with said track guide means to permit relative motion between said semicylindrical members, garment clamping means carried by each said plate member, an upright post near the edge of said opening, means on said post for releasably holding the button and button hole strips of said garment, and a closure for the neck opening of the garment also supported by said post.

5. Garment finishing apparatus comprising a frame having a top opening and provided with means for discharging a stream of heated air through said opening, a pair of opposed, substantially semicylindrical plate members vertically disposed in edge lapped relationship to surround said opening and to direct said air stream, guide track means on top of said frame, complementary guide means on each of said semicylindrical members for cooperation with said track guide means to permit relative motion between said semicylindrical members, garment clamping means carried by each said plate member, means operatively linked to said semicylindrical members and to said clamping means for producing clamping movement of said clamping means when the semicylindrical members are moved into garment contacting position, an upright post near the edge of said opening, means on said post for releasably holding the button and button hole strips of said garment, and a closure for the neck opening of the garment also supported by said post.

6. In a garment finishing apparatus of the type described wherein a garment is dried by an air draft released internally thereof, a closure for a sleeve comprising a cup-like member having a perforate, generally cylindrical side wall portion and an imperforate end wall, cuff clamping means carried by said member and disposed when in clamping position, to maintain the garment cuff in contact with said perforate side wall, and extension means, carried by said member and disposed to overlie and bear upon the gusset portion of said garment sleeve when the sleeve is inflated by said air draft.

7. Garment finishing apparatus comprising a frame having a top opening and provided with means for discharging a stream of heated air through said opening, upright post means affixed to said frame in the neighborhood of said opening, closure means for the collar portion of a garment and supported on the upper portion of said post, a collar clamp carried by said closure means, clamping means for the front portion of said garment and carried by said post, common control means for simultaneously actuating said collar clamp and said front clamp, and a pocket

finishing device carried by said post including a hollow body having an opening in communication with said air stream, and hollow arms in communication with said body, said arms having mouth-like apertures arranged to apply air from said air stream to pocket portions externally of said garment.

8. Garment finishing apparatus comprising a frame having a top opening and provided with means for discharging a stream of heated air through said opening and upwardly into the interior of a garment supported thereabove, post means affixed to said frame in the neighborhood of said opening and disposed to extend upwardly within said garment, closure means for the collar portion of said garment and carried by the upper portion of said post, a collar clamp carried by said post adjacent said collar closure means, front clamping means for the button and button hole strips of said garment and carried by said post, unitary control means for simultaneously actuating said collar clamp and said front clamp, and a pocket finishing device carried by said post including a hollow body having an opening in communication with said air stream and hollow arms in communication with said body, said arms having mouth-like apertures arranged to apply air from said air stream to pocket portions externally of said garment, said arms being movably mounted on said body and being normally biased to extend into the space occupied by the air expanded garment.

9. Garment finishing apparatus comprising a frame having a top opening and provided with means for discharging a stream of heated air through said opening and upwardly into the interior of a garment supported thereabove, post means affixed to said frame in the neighborhood of said opening and disposed to extend upwardly within said garment, closure means for the collar portion of said garment and carried by the upper portion of said post, a collar clamp carried by said post adjacent said collar closure means, front clamping means for the button and button hole strips of said garment and carried by said post, unitary control means for simultaneously actuating said collar clamp and said front clamp and a pocket finishing device carried by said post including a hollow body having an opening in communication with said air stream and hollow arms in communication with said body, said arms having mouth-like apertures arranged to apply air from said air stream to pocket portions externally of said garment, said arms being movably mounted on said body and being normally biased to extend into the space occupied by the air expanded garment, a generally cylindrical expansible and contractable neck mounted on said frame around said opening and around which the garment skirt may be dressed, and means for clamping the garment skirt thereto.

10. Garment finishing apparatus comprising a frame having a top opening and provided with means for discharging a stream of heated air through said opening and upwardly into the interior of a garment supported thereabove, post means affixed to said frame in the neighborhood of said opening and disposed to extend upwardly within said garment, closure means for the collar portion of said garment and carried by the upper portion of said post, a collar clamp carried by said post adjacent said collar closure means, front clamping means for the button and button hole strips of said garment and carried by said post, unitary control means for simultaneously actuating said collar clamp and said front clamp, and a pocket finishing device carried by said post including a hollow body having an opening in communication with said air stream and hollow arms in communication with said body, said arms having mouth-like apertures arranged to apply air from said air stream to pocket portions externally of said garment, said arms being movably mounted on said body and being normally biased to extend into the space occupied by the air expanded garment, a generally cylindrical expansible and contractable neck mounted on said frame around said opening and around which the garment skirt may be dressed, and means for clamping the garment skirt thereto, closure means for the cuff portions of said garment, and clamping means for retaining said cuff portions in contact with said closure means.

11. Garment finishing apparatus comprising a frame having a top opening and provided with means for discharging a stream of heated air through said opening, means for securing the end edge portions of the garment skirt around the edge of said opening, an upright post near the edge of said opening, means on said post for releasably holding the button and buttonhole strips of a garment with the post bridging the opening between the edges of said strips, and a closure for the neck opening of the garment also supported by said post, said post being provided with a through opening, the inner end of which communicates with the space within the garment and hence with the top opening of said frame, and means communicating with the outer end of said opening for applying heated air to the breast pocket externally of the garment.

12. Garment finishing apparatus, comprising a frame having a top opening and provided with means for discharging a stream of heated air through said opening, a generally cylindrical expansible and contractible neck mounted on said frame at said opening and around which the lower edge portion of the garment skirt may be dressed, means for clamping the garment skirt thereto, closing means for the sleeve and neck openings of the garment, a post to which the button and buttonhole strips may be secured, and a conduit on said post open at its inner end to the space within the garment and at its outer end lying externally of the garment and opposite the breast pocket thereof, for conducting heated air from the space within the garment and applying it externally to the garment pocket.

ALBERT MATTHEWS.
ROBERT C. PAULY.
BRUCE E. MAXON.